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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA  
SAN FRANCISCO DIVISION

SONOS, INC.

## Plaintiff and Counter-Defendant,

20 |

GOOGLE LLC,

Case No. 3:20-cv-06754-WHA  
Related to Case No. 3:21-cv-07559-WHA

# **GOOGLE'S RESPONSE TO SONOS'S MOTION IN LIMINE NO. 2 TO LIMIT THE TESTIMONY OF GOOGLE'S TECHNICAL EXPERT DR. DAN SCHONFELD**

Date: May 3, 2023  
Time: 12:00 p.m.  
Location: Courtroom 12, 19th Floor  
Judge: Hon. William Alsup

FILED UNDER SEAL

1 Sonos improperly moves to exclude Dr. Schonfeld's opinions regarding invalidity of the  
 2 '966 patent in view of the prior art. Sonos alleges that Dr. Schonfeld's '966 opinions are conclusory  
 3 because he cross-references his '885 opinions on related claim elements. But the patents are related  
 4 and such cross-references to other parts of the same report are proper and provide full notice of Dr.  
 5 Schonfeld's opinions. Indeed, Sonos ignores the substantial analysis and factual evidence contained  
 6 in the underlying cross-referenced portions of Dr. Schonfeld's report. A review of those portions  
 7 makes clear that his analysis applied equally to both the '885 patent and the related elements of the  
 8 '966 patent. For example, for '966 claim elements covering *sending* messages from a controller to  
 9 a speaker, Dr. Schonfeld cross-referenced his opinions on the corresponding '885 claim element  
 10 related to *receiving* those same messages by the speaker. Tracing the cross-references for each '966  
 11 claim element, it is obvious there is nothing conclusory about Dr. Schonfeld's opinions. Notably,  
 12 the parties recognized throughout this case that the '885 and '966 patents cover essentially the same  
 13 subject matter and even Sonos's own experts cross-referenced their opinions on one patent in their  
 14 opinions regarding the other. Dr. Schonfeld, too, was free to employ the non-controversial  
 15 technique of cross-referencing previously-discussed evidence and analysis—which, again, is  
 16 particularly appropriate here, where the '885 claim covers a speaker in a multimedia system, and  
 17 the '966 claims cover that *same* system from the perspective of a controller.

18 Sonos also seeks to preclude Dr. Schonfeld from offering opinions on certain Bose products  
 19 timely disclosed in Google's invalidity contentions and in Dr. Schonfeld's opening report for the  
 20 patent showdown. Sonos's allegation that Dr. Schonfeld's opinions were not adequately disclosed  
 21 is belied by the fact that its own expert responded to them in a rebuttal report and Sonos twice  
 22 deposed Dr. Schonfeld on the opinions. Thus, there is no valid basis to exclude Dr. Schonfeld's  
 23 opinions that Sonos has been aware of for several months. Sonos also seeks to exclude opinions  
 24 regarding Google's re-design, but this dispute is moot, as the Court already found the re-design will  
 25 be presented at trial. Dkt. 580. Accordingly, Sonos's MIL 2 should be denied in its entirety.

26 **I. ARGUMENT**

27 **A. Sonos Cites No Case Precluding Opinions in Similar Circumstances**

28 Sonos does not cite a single case excluding expert opinions in similar circumstances.

1 Sonos's lead case is *Innogenetics, N.V. v. Abbott Lab'ys*, 512 F.3d 1363, 1373 (Fed. Cir. 2008),  
 2 which had nothing to do with incorporation by reference. Rather, that court excluded an expert  
 3 opinion as too conclusory where the expert "merely list[ed] a number of prior art references and  
 4 then conclude[d] with [a] stock phrase" that the claim was obvious. *Id.* That is a far cry from Dr.  
 5 Schonfeld's detailed invalidity expert opinions and analysis. Taking the Sonos 2005 System prior  
 6 art reference as an example, he described the system for 42 pages of his report, Ex. 1 at 50-92, then  
 7 mapped the limitations of *just* claim 1 of the '885 patent for 114 pages. *Id.* at 219-333.

8       The second case cited by Sonos, *Salgado by Salgado v. Gen. Motors Corp.*, 150 F.3d 735,  
 9 741 (7th Cir. 1998), is not from this Circuit and is even less relevant. There, the court struck an  
 10 expert report after the plaintiff failed to meet the deadline despite multiple extensions and "specific  
 11 warning . . . that failure to meet its final deadline would result in dismissal." *Id.* There is no dispute  
 12 here that Dr. Schonfeld's report was timely submitted. Sonos's reliance on *Finisar Corp. v. DirecTV*  
 13 *Grp., Inc.*, 2006 WL 1207828, at \*2 (E.D. Tex. May 2, 2006), is similarly misplaced. There, the  
 14 substantive portions of plaintiff's expert report "consist[ed] of three paragraphs outlining the  
 15 testimony he will supposedly provide at the trial," which boiled down to "describ[ing] how to use a  
 16 remote control to watch TV." The court found this testimony so basic it was not a true expert  
 17 opinion and the "three paragraphs" to be far too conclusory. *Id.* Dr. Schonfeld's report, on the other  
 18 hand, includes detailed opinions and voluminous analysis of technical documents and source code.

19       In *Sprint Commc'n Co. LP v. Charter Commc'n Inc.*, 2021 WL 979307, at \*2 (D. Del.  
 20 Mar. 16, 2021), the expert report was stricken due to improper incorporation by reference, but that  
 21 was because the expert attempted to "incorporate nine prior reports totaling over 3,351 pages and  
 22 all his prior deposition and trial testimony, which amounts to at least eighteen days of testimony."  
 23 *Id.* By contrast, Dr. Schonfeld provided specific and narrow cross-references to *his own* opinions  
 24 in the *same report* regarding a *closely related patent*. Sonos's cited cases are all inapposite.

25       **B. Dr. Schonfeld Should Be Able To Offer Opinions That The Asserted Claims  
 26 Of The '966 Patent Are Invalid As Anticipated By Or Obvious Over Prior Art.**

27       By seeking to preclude Dr. Schonfeld from opining on the invalidity of the '966 patent  
 28 altogether, Sonos's motion effectively seeks an untimely summary judgment of no invalidity of the

1 '996 patent, which is improper because “[a] motion in limine is not the proper vehicle for seeking a  
 2 dispositive ruling on a claim, particularly after the deadline for such motions has passed.” *Hana*  
 3 *Fin., Inc. v. Hana Bank*, 735 F.3d 1158, 1162 & n.4 (9th Cir. 2013). Sonos’s MIL should be denied  
 4 for this reason alone. As explained below, however, Sonos’s MIL also fails on the merits.

5       1.     Dr. Schonfeld’s Analysis of the ’966 Patent Properly Cross-Referenced  
Related Evidence and Opinions Regarding Invalidity of the ’885 Patent

6       It is well-established that experts may cross reference other paragraphs of their report for  
 7 pertinent and related opinions. *E.g., Cyntec Co., Ltd. v. Chilisin Elecs. Corp.*, No. 18-CV-00939-  
 8 PJH, 2020 WL 5366319, at \*13 (N.D. Cal. Sept. 8, 2020); *see also, Acceleration Bay LLC. V.*  
 9 *Activision Blizzard, Inc.*, 2017 WL 11517421, at \*2 (D. Del. Nov. 7, 2017) (accepting “expert’s use  
 10 of cross referencing” given scope of issues and because of the “heavy burden of persuasion on the  
 11 party that seeks to exclude or strike significant portions of the opposing party’s expert report”). For  
 12 example, the court in *Cyntec* denied defendant’s motion for summary judgment that framed an  
 13 expert’s doctrine of equivalents opinions as being conclusory and unsupported because the DOE  
 14 opinions cross-referenced other portions of the expert’s report and “by cross-referencing the other  
 15 paragraphs, the report goes beyond an entirely conclusory expert opinion[.]” *Id.* Similarly, here,  
 16 Dr. Schonfeld provided opinions regarding the ’966 patent by cross-referencing his closely related  
 17 and highly pertinent opinions and evidence presented in the context of the related ‘885 patent.  
 18

19       Nor can Sonos credibly challenge the sufficiency of Dr. Schonfeld’s cross references. First,  
 20 it is undisputed that the ’885 and ’966 patents share a common specification and the only difference  
 21 between them is that the ’885 patent claims the alleged invention from the perspective of a playback  
 22 device, whereas the ’966 patent is claimed from the perspective of a computing device (*i.e.*, a  
 23 controller). Moreover, Dr. Schonfeld did not provide blanket, scattershot cross-references; rather,  
 24 for each ’966 claim limitation, he provided targeted cross-references to specific portions of his ’885  
 25 opinions. *See infra* § I.A.2. Thus, it is unsurprising that Sonos’s technical expert, Dr. Almeroth,  
 26 understood and responded to Dr. Schonfeld’s ’966 opinions despite the supposedly ambiguous  
 27 cross-references. For example, Dr. Almeroth recognized that “Dr. Schonfeld mapped ‘network  
 28 device’ of the ’885 patent, for example, to the ‘computing device’ of the ’996 patent” and, thus,

1 responded to Dr. Schonfeld's opinions with that understanding. Ex. 2, Almeroth Reb. ¶ 927.  
 2 Moreover, Dr. Almeroth's own invalidity rebuttal cross-referenced his analysis with respect to the  
 3 '966 patent. *See e.g.*, Ex. 3, Almeroth First Supp. Rep. ¶¶ 14, 45, 49, 53, 57, 61, 65, 69, 73, 99, 124,  
 4 128, 132, 136, 140, 144, 152, 156, 160, 164.<sup>1</sup> Tellingly, even when faced with the burden of proving  
 5 infringement, Dr. Almeroth also similarly cross-referenced his '966 patent analysis in his '885  
 6 patent opinions. *E.g.*, Ex. 4, Almeroth 11.30.2022 Rep. ¶ 373 (opining that "Google's 'speaker  
 7 group' functionality satisfies the 'zone scene' limitations" of the '966 Patent "[f]or the same  
 8 reasons" as the '885 patent). Both Sonos's expert and Google's expert were free to cross reference  
 9 as they did because the two patents' claims cover essentially the same subject matter.

10 Notably, Sonos never suggests that it or its experts were unable to comprehend Dr.  
 11 Schonfeld's '966 patent invalidity theories. Nor could it. Sonos and Dr. Almeroth understood Dr.  
 12 Schonfeld's opinions and responded to them through multiple expert reports. Sonos also deposed  
 13 Dr. Schonfeld, yet at no point raised any confusion about his '966 opinions—to the contrary, even  
 14 Sonos's attorney conflated the '885 and '966 patents at deposition. Ex. 5, Schonfeld 2/3/23 Tr.,  
 15 13:25-16:11; 38:2-41:16 (questioning Dr. Schonfeld about his opinions without raising any  
 16 distinctions between the '885 and '966 patents). Accordingly, despite now feigning ignorance of  
 17 Dr. Schonfeld's opinions, it is clear Sonos and its own experts had no trouble responding to those  
 18 opinions, never expressed any confusion over Dr. Schonfeld's opinions, and even themselves treated  
 19 the two patents in a similar manner. There is no basis to preclude Dr. Schonfeld's opinions.

20       2.     Dr. Schonfeld Provided Clear Opinions Regarding the '966 Patent

21       Dr. Schonfeld's '966 patent opinions contain limitation-by-limitation cross-references to  
 22 clearly relevant and related analyses and evidence presented in the context of the '885 patent,  
 23 constituting well more than a conclusory expert opinion as shown in the following examples.

24       (a)     *Lim. 1.0 (Preamble)* "A computing device comprising"; *Lim. 1.4* "while serving as  
                   a controller . . ."

25       Limitations 1.0 and 1.4 of the '966 patent both describe the controller in the speaker system,

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26  
 27  
 28       <sup>1</sup> Sonos's damages expert, Mr. Malackowski, similarly conflated the '885 and '966 patents for  
           purposes of his damages analysis. *See* Ex. 6, Malackowski Rep. at 18, 78-79, 85.

1 which Dr. Schonfeld explained corresponds to the “network device” in the ’885 claims. Ex. 1 ¶ 966;  
 2 *see generally id.* ¶¶ 333-71, 372-406, and 440-48 (Sonos System), ¶¶ 510-760 (Squeezebox System),  
 3 ¶¶ 899-927 and 954-959 (Bose System). He thoroughly described the “computing device” (i.e.,  
 4 “network device”) in his analysis. *See id.*

5       (b)     *Lim. 1.1 “one or more processors”; Lim. 1.2 “a non-transitory computer-readable  
                  medium”; Lim. 1.3 “program instructions . . . cause the computing device to  
                  perform functions comprising”*

7       Limitations 1.1, 1.2, and 1.3 of the ’966 patent all describe basic requirements of the  
 8 controller device, which are common to any such controller, including processors, software  
 9 instructions, and a place where those software instructions reside (computer readable medium). As  
 10 such, Dr. Schonfeld addresses them in the same way. Taking the Sonos 2005 System as an example,  
 11 Dr. Schonfeld cross references ¶¶ 333-71, 372-406, and 440-48 of his ’885 opinion where he  
 12 describes the functionality of the computing device, including its ability to control playback and  
 13 grouping of Zone Players over a network. *See id.* Executing these functions necessarily entails the  
 14 use of one or more processors and executing software. Sonos does not dispute these claim elements.  
 15 Ex. 2 at ¶¶ 489-551. As such, Dr. Schonfeld mapped the relevant evidence to this claim limitation.  
 16 *See also* Ex. 1 at ¶¶ 510-760, 800-05 (Squeezebox), ¶¶ 899-927, 954-59 (Bose).

17       (c)     *Lim. 1.5 “receiving a first request to create a first zone scene . . . ”; Lim. 1.6 “based  
                  on the first request, i) causing creation of the first zone scene, ii) causing an  
                  indication of the first zone scene to be transmitted to the first zone player, and iii)  
                  causing storage of the first zone scene”*

19       For these limitations, Dr. Schonfeld cross-references his related opinions on limitation 1.6  
 20 of the ’885 patent. *E.g., id.* ¶¶ 971, 973. Again, the limitations are two sides of the same coin—the  
 21 ’885 claims a speaker receiving an indication that it has been added to a zone scene, while the ’966  
 22 claims the creation of the zone scene and the transmission of that same indication. Thus, Dr.  
 23 Schonfeld noted that he was specifically incorporating by reference his “discussion of the ‘first zone  
 24 scene’ disclosure” in the prior art, specifically including “the creation of the first zone scene, its  
 25 composition, its synchronous playback configuration, and the ability of invocation of that zone  
 26 scene.” *Id.* ¶ 971. For Sonos 2005, for example, Dr. Schonfeld opined that “[p]redefined groups,  
 27 such as the ‘party mode’ in the Sonos System, [] meet this [zone scene] claim limitation,” and that  
 28

1 Sonos's own witnesses testified that "the Party Mode in our original controller was a command sent  
 2 by the control design that would tell the speakers in that moment to go for a group." *E.g., id.* ¶¶  
 3 340, 342. Accordingly, Dr. Schonfeld clearly explained that the controller receives a request to  
 4 create a "zone scene." *See also* Ex. 1 at ¶¶ 510-70 (same for Squeezebox), ¶¶ 899-904 (Bose).

5 Sonos argues that Dr. Schonfeld's opinions are deficient because the identical claim  
 6 language in limitation 1.5 of the '966 patent does not appear in the '885 patent claims. Mot. at 4.  
 7 This argument fails because the "request to create a first zone scene" is met by the user using the  
 8 controller to create a saved zone group, which Dr. Schonfeld clearly identifies in the cross-  
 9 referenced analysis of the prior art. *E.g., id.* ¶ 337 ("Party Mode that was originally put into the  
 10 product was a button" and noting that the user could "touch the zones button on [the] controller" to  
 11 create speaker groups). Sonos also attempts to rely on "storage" of a "zone scene" as a difference  
 12 between the '885 and '966 claims, but the ability to save a "zone scene" is at least inherent under  
 13 the Court's construction, and Dr. Schonfeld's cross-referenced opinions nevertheless explain the  
 14 prior art zone scenes are saved. *E.g., id.* ¶¶ 336 (zone scenes "are all saved"), 343 (prior art "Party  
 15 Mode" is saved zone scene), 344 (user-created groups "are saved"), ¶¶ 512-14 (Squeezebox), 542-  
 16 44 (Squeezebox groupID information is saved), ¶¶ 900-04 (Bose uses saved room/house button).

17 (d) *Lim. 1.7 "receiving a second request to create a second zone scene . . ."; Lim. 1.8  
 18 "based on the second request, i) causing creation of the second zone scene, ii)  
 19 causing an indication of the second zone scene to be transmitted to the first zone  
 player, and iii) causing storage of the second zone scene"*

20 Because the request to create and creation of the "second zone scene" uses the same process  
 21 as creation of the first zone scene – *e.g.*, through the use of additional speaker groups or party mode  
 22 groups – Dr. Schonfeld cross referenced to the same evidence in his '885 opinions. *See, e.g., id.* ¶¶  
 23 333-71. Dr. Schonfeld also explained that Zone Players added to the overlapping speaker groups  
 24 remain in standalone mode because "speakers are often operating in standalone mode because they  
 25 may play back music individually while still being a part of the Party Mode." *Id.* ¶ 374. He also  
 26 explained the mechanism, on a source code level, of how the "indications" are sent to the zone  
 27 players, including through a "SetAVTransportURI SOAP action specifying a Rincon group URI  
 28 with the group coordinator UUID." *Id.* Accordingly, the description provided by Dr. Schonfeld in

1 the cited portions apply to this limitation. *See also* ¶¶ 510-760 (Squeezebox), ¶¶ 899-927 (Bose).

2 (e) *Lim. 1.9 “displaying a representation of the first zone scene and a representation  
of the second zone scene”*

3 Here, for example, Dr. Schonfeld cross references ¶¶ 333-406 of his '885 opinion for the  
4 Sonos prior art system in which he describes source code and documents to illustrate different zone  
5 scenes, including, as an example, paragraph 337 that shows a graphical depiction of zone players  
6 being added to a zone scene. *See also id.* ¶¶ 510-760 (Squeezebox), ¶¶ 899-927 (Bose).

7 (f) *Lim. 1.10 “. . . receiving a third request to invoke the first zone scene”; Lim. 1.11  
8 “based on the third request, causing the first zone player to transition from operating  
in the standalone mode . . . ”*

9 For these limitations (which relate to invoking a zone scene and transitioning a zone player  
10 from standalone mode), Dr. Schonfeld cross-references his related opinions on limitations 1.9 and  
11 1.10 of the '885 patent (which relate to exactly the same thing). *E.g., id.* ¶¶ 977-78. With respect  
12 to the Sonos 2005 System, for example, Dr. Schonfeld describes that a user may select the Zone  
13 Player or group in the “zones pane” from the controller, which can meet the request to invoke, and  
14 that causes the zone players to operate as a synchronous group, meeting the “transition” element.  
15 *Id.* ¶¶ 441-43, 450-52; *see also id.* ¶¶ 801-08 (Squeezebox), ¶¶ 954-61 (Bose).

16 The foregoing analysis also applies to the '966 dependent claims (which also have mirror  
17 elements in the '885 claims), and Google can provide a similar mapping at the Court's request.

### 18 C. Dr. Schonfeld Properly Opined That Bose Invalidates

19 Sonos also seeks to exclude opinions about Bose Lifestyle combined with Bose Link,  
20 FreeSpace or SA-2/SA-3 amplifiers. But Sonos has long been on notice of the obviousness theories  
21 regarding Bose prior art. Dr. Schonfeld served his showdown invalidity report nearly ten months  
22 ago containing the same analysis of Bose (Ex. 7, ¶¶ 619-722) including the Bose Link protocol (¶¶  
23 635, 653, 679, 699) and SA-2/SA-3 amplifiers (¶¶ 633-35, 649, 677-78)—the very combinations  
24 Sonos now asserts were undisclosed. Moreover, Sonos already attempted and failed to strike the  
25 Bose opinions.<sup>2</sup> Sonos's second attempt should fare no better for the same reasons.

27 <sup>2</sup> Relevant facts regarding Bose are in Google's opposition to Sonos's prior motion. Dkt. 492 at 8-  
28 11. Despite the Court's admonitions, Sonos again belatedly seeks to exclude the Bose opinions.  
Dkt. 315 at 9; Dkt. 565 at 8-9.

1 DATED: April 24, 2023

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## **CERTIFICATE OF SERVICE**

Pursuant to the Federal Rules of Civil Procedure and Local Rule 5-1, I hereby certify that, on April 24, 2023, all counsel of record who have appeared in this case are being served with a copy of the foregoing via email.

/s/ Sean Pak  
Sean Pak

## **ECF ATTESTATION**

I, Clement S. Roberts, am the ECF User whose ID and password are being used to file this Response. In compliance with Civil Local Rule 5-1, I hereby attest that Sean Pak, counsel for Google, has concurred in this filing.

Dated: April 25, 2023

By: /s/ *Clement S. Roberts*

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Clement S. Roberts